Summation of Multiples (hard)

If we list all the natural numbers below 10 that are multiples of 3 or 5, we get 3, 5, 6 and 9. The sum of these multiples is 3+5+6+9=23.

Now you are given an integer N and an array of length K. You have to find the sum of all numbers that are multiples of at least one array's elements and below N.

Input

line1: K (1 <= K <= 15) , N (1 <= N <= 10^9)

line2: K space-sapareted integers , the elements of the array , all elements of the array is between 1 and 100 inclusive.

note: the least common multipe of all elements will not be bigger than 10^{18}

Output

one integer, the answer to the problem

Example

Input:

2 10

3 5

Output:

23